



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,207	10/31/2001	George Brenguer	2988-679	1197

7590 09/30/2003  
Pennie & Edmonds  
1155 Avenue of the Americas  
New York, NY 10036-2711

EXAMINER

LANGEL, WAYNE A

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 09/30/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>869207</b>	Applicant(s) <b>Bronguer et al</b>
	Examiner <b>Lengel</b>	Group Art Unit <b>1754</b>

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

☒ Claim(s) 1-16 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-16 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

**Application Papers**

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119 (a)-(d)**

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some\* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_

☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

**Attachment(s)**

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Interview Summary, PTO-413

☐ Notice of Informal Patent Application, PTO-152

☐ Other \_\_\_\_\_

**Office Action Summary**

Art Unit 1754

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Schirmann et al. '421 in view of European 0431998. Schirmann et al. '421 discloses a process for producing hydrazine by feeding azine and water to a distillation column, heating the azine and water in the column to hydrolyze the azine to produce hydrazine and ketone, removing the hydrazine at the bottom of the column, and removing the ketone at the top of the column. (See column 4, lines 16-63.) Schirmann et al. '421 discloses at column 4, lines 25-30 that it is desirable to recycle the water separated from the ketone-water azeotrope directly into the column at the level of the main feed. Such water which is introduced to the column would inherently provide heat for the hydrolyzing step and the removing step in the process of Schirmann et al. '421. The difference between the process disclosed by Schirmann et al. '421, and that recited in applicant's claims, is that Schirmann et al. '421 does not

disclose that the distillation column should have a boiling vessel, and that such boiling vessel should supply heat required for the hydrolyzing step and the removing step. European 0431998 discloses a process for producing hydrazine by feeding azine and water to a distillation column, heating the azine and water in the column to hydrolyze the azine to produce hydrazine and ketone, and removing the resulting hydrazine and ketone. European 0431998 teaches that it is possible to improve the yield for the process by minimizing the losses of hydrazine hydrate by decomposition, by means of using a boiling technique which is provided by a forced-circulation boiling vessel. It would be prima facie obvious from European 0431998 to modify the process of Schirmann et al. '421 by employing a distillation column having a boiling vessel, and supplying heat required for the hydrolyzing step and the removing step by such boiling vessel, since Schirmann et al. '421 teaches at column 4, lines 16-19 that the invention permits any fractionating column of a conventional type to be employed, which would include the fractionating column of European 0431998, and one of ordinary skill in the art would be motivated to employ the boiling vessel of European 0431998 in the distillation column of Schirmann et al. '421 in order to minimize the decomposition of hydrazine and to thereby increase the yield of hydrazine for economic purposes.

Serial No. 09/869,207

-4-

Art Unit 1754

The other references are made of record for disclosing various methods for preparing hydrazine hydrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne A. Langel whose telephone number is (703) 308-0248. The examiner can normally be reached on Monday through Friday from 8 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (703) 308-3837. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2351.

WAL:cdc

September 15, 2003

*Wayne A. Langel*  
WAYNE A. LANGEL  
PRIMARY EXAMINER